



## Feature

Reduced to about 40% the cubic volume of P Case.

- New low profile case size.
- Compatible with automatic pick and place equipment.
- Meets or Exceeds EIA standard 535BAAC.
- Environment-Friendly(Pb-free) tantalum capacitor.

## Specifications

Capacitance	Range	1.0 $\mu$ F to 10 $\mu$ F						
	Tolerance	$\pm 20\%$ (M)						
Dissipation Factor (Tan $\delta$ )		Refer to Specification						
Leakage Current		between 0.01CV and 0.5 $\mu$ A, whichever is larger						
Rated Voltage(VR)	$T \leq 85^{\circ}\text{C}$	4.0	6.3	10.0	16.0	20.0	25.0	35.0
Category Voltage(V)	$85^{\circ}\text{C} < T \leq 125^{\circ}\text{C}$	2.5	4.0	6.3	10.0	13.0	16.0	22.0
Surge Voltage(V)	$T \leq 85^{\circ}\text{C}$	5.2	8.0	13.0	20.0	25.0	32.0	44.0
	$85^{\circ}\text{C} < T \leq 125^{\circ}\text{C}$	3.2	5.0	8.0	13.0	16.0	20.0	28.0
Operating Temperature		$-55^{\circ}\text{C}$ to $125^{\circ}\text{C}$						

## Standard Value and Case Size

R . V		4V(0G)	6.3V(0J)	10V(1A)	16V(1C)	20V(1D)	25V(1E)
Cap.( $\mu$ F)							
1.0	105	J	J	J	J		
1.5	155						
2.2	225	J	J	J	J		
3.3	335						
4.7	475	J	J, K	J			
6.8	685	J	J				
10	106	J, K, Q	J	J			
15	156						
22	226						

Precautions in using  
Tantalum Capacitors

4 Characteristics  
Explanation

SCN Series

SCS Series

SCS-P Series

SCM Series

SCF Series

SCE Series

SCL Series

PCS Series

PCL Series

Marking  
Specification

Taping  
Specification

## Ratings & Part Number Reference

Part Number	Case Size	Capacitance ( $\mu$ F)	DC Leakage ( $\mu$ A) @ +25 °C Max.	DF (%) @ +25 °C 120Hz Max.	ESR ( $\Omega$ ) @ +25 °C Max.
4 volt Rating @ +85 °C (2.5 volt Rating @ +125 °C)					
TCSCM0G105MJAR	J	1.0	0.5	8.0	15
TCSCM0G225MJAR	J	2.2	0.5	8.0	10
TCSCM0G475MJAR	J	4.7	0.5	8.0	10
TCSCM0G685MJAR	J	6.8	0.5	8.0	6
TCSCM0G106MJAR	J	10	0.5	8.0	6
TCSCM0G106MKAR	K	10	0.5	20.0	6
TCSCM0G106MQAR	Q	10	0.5	18.0	9.4
6.3 volt Rating @ +85 °C (4 volt Rating @ +125 °C)					
TCSCM0J105MJAR	J	1.0	0.5	8.0	15
TCSCM0J225MJAR	J	2.2	0.5	8.0	10
TCSCM0J475MJAR	J	4.7	0.5	8.0	10
TCSCM0J475MKAR	K	4.7	0.5	20.0	8
TCSCM0J685MJAR	J	6.8	0.5	8.0	6
TCSCM0J106MJAR	J	10	0.63	8.0	4
10 volt Rating @ +85 °C (6.3 volt Rating @ +125 °C)					
TCSCM1A105MJAR	J	1.0	0.5	8.0	10
TCSCM1A225MJAR	J	2.2	0.5	8.0	10
TCSCM1A475MJAR	J	4.7	0.5	8.0	6
TCSCM1A106MJAR	J	10	1	20	7
16 volt Rating @ +85 °C (10 volt Rating @ +125 °C)					
TCSCM1C105MJAR	J	1.0	0.5	8.0	15
TCSCM1C225MJAR	J	2.2	0.5	8.0	7.5

All technical data relates to an ambient temperature of +25 °C.  
 Capacitance and DF are measured at 120Hz, 0.5V RMS with a maximum DC bias of 2.0 volts.  
 DCL is measured at rated voltage after 5 minutes.  
 Insert M tolerance for  $\pm 20\%$ .